

In the hope that some* of our members stationed in *Guzerat* will carry on the investigation of the fossils, not only of *Perim*, but of other parts of the formation in *Kattywár*, I have hastened to lay before them this imperfect sketch, without waiting for a report on the *nature of the fossils* found, or presuming myself to offer any opinion, or to draw a conclusion on that part of the subject.

II.—*Note on Mastodons of the Sewaliks.* By Capt. P. T. CAUTLEY,
Superintendent of the Doab Canal. Pl. XL.

In the present state of the researches into the fossil remains of the Sewaliks, it will be interesting to note any discovery of peculiar interest, without entering upon a description in detail. Such a description may, with propriety, be reserved, until the possession of a more perfect and a more numerous collection of remains enables us to enter upon the description with greater confidence: whilst, in the mean time, to those who are interested in the study, the periodical announcement of progress made in our operations, cannot be devoid of interest; under this idea I did myself the pleasure of forwarding to your Society the note on the dentition of the *Mastodon Angustidens* (variety of), and now send you one on a skull of another variety of *Mastodon* which has been lately received. The sketches are drawn on transfer paper, and will, I hope, be intelligible.

Fig. 1 and 2, are representations of the fossil skull—Fig. 1 being the front, and Fig. 2, the profile or side view. Fig. 3 and 4, are similar outlines of the existing elephant, on a scale of one-eighth on linear measurement.

The fossil is exceedingly perfect in some respects. The left orbit and maxillaries are as sharp and well defined as in the recent skull; the frontal and nasals are tolerably perfect, the specimen is fractured obliquely, removing the temporal swellings and diploe of the cranium, together with the occipital condyles and foramen magnum; the curve of the occipital on its external surface is however retained, and although sutures are altogether wanting, and the alveoli of the tusks are mutilated, the specimen may be considered as sufficient to give a perfect idea of the form of skull; and, as a form perfectly unique amongst the proboscidean pachydermata, will be looked upon with satisfaction by all those who take interest in the additions that have of late years been so rapidly made to palæontology, and the catalogue of animals now no longer existing on the globe. The present skull derives additional interest from its being so different from the only

type of the same genus or co-genus (for it may be permitted so to designate the elephant) which has been left to us—so different indeed, as to completely modify the construction of the head, and the arrangement of the muscular and fleshy matter that must have belonged to it.

Without entering into any minutiae of detail on the peculiarities of the head, of which the drawings will give a representation, and which detail will be reserved until our collections enable us to bring under one view all the varieties of this genus that the Sewaliks may contain, it will be sufficient, in announcing this very interesting addition to our cabinet, to draw attention to a few leading points.

In the skull of the existing elephant, the excess of longitudinal measurement, over that in the contrary direction, owing to the great development of the superior portion of the cranium, is one of the most marked peculiarities of its form; the height from the external nasal opening to the top or apex of the cranium is immense, although undergoing modification from age; this excessive development not being derived from any increase of size to the cerebral cavity, but to a wide space composed of cellular bone or diploe, giving an external and deep covering to all that space occupied by the brain; the size of the orbit is small with comparison to the temporal region; the large external nasal aperture is situated between the orbits; and the front in the Indian species is slightly depressed:—now in turning to the fossil, we find that the whole of these peculiarities, are either reversed, or modified in an extraordinary degree.

The elevated and massive cranium does not exist, the slope towards the occipital and foramen magnum commencing from the top of the external nasal opening, and falling off to the rear in an abrupt angle; the size of the orbit is large, and its encircling bones massive and prominent; the space between the orbits to the front continued up to the nasal opening, is depressed to an enormous extent, and the two lines of alveoli of the tusks strongly marked; the temporal fossæ are comparatively small with those of the existing elephant, and the temporal bones; which although broken off in the specimen from which the drawing is taken, exists in another skull in our possession, appearing to be large and composed of cellular bone. The angle formed by the tusks with the grinding surface is more obtuse than in the existing elephant, and the form of head, instead of possessing the proportion assimilating the skull of the elephant to that of man, may be considered as nearly square, or perhaps possessing a breadth in greater proportion than the length. The height of the maxillary bones which is great in the elephant, is here much exaggerated, and

the form and profile especially is so peculiar, that a glance at the sketch will, by comparison with that of the existing elephant also given, be sufficiently striking.

The suborbital foramen is by no means large; the proportion of diploe in the upper part of the cranium bears no comparison with that in the existing elephant, these differences combined with the peculiarity of form and position of the external nasal aperture, may, in all probability, modify the extent to which this variety of *Mastodon* was provided with trunk; but to forbear from surmises or speculations in the present imperfect state of the inquiry, it will be sufficient to place this as a second to the *angustidens* formerly noted.

P. S.—A letter this moment received from Captain CAUTLEY announces the discovery of a superb specimen of the *Mastodon angustidens*, a skull with both lines of molars, palate, and one orbit entire: he adds—"We have much still to learn of these *Mastodons*; with regard to the *Mastodon elephantoides* of CLIFT, there are evidently two species, of the same character as to dentition, but with a remarkable difference in the form of cranium, one of which has the flat and the other the elevated crown." A very perfect head of a horse has also just been extracted by the *Sewalik* working parties, from the hard sandstone.—ED.

III.—Additions to the Ornithology of Népal. By B. H. HODGSON, Esq.

1. Indication of a new Genus of Insessorial Birds.

CONIROSTRES, *Sturnidæ*, *Lamprotorninæ*? DENTIROSTRES, *Merulidæ*, *Crateropodinæ*?

In the suite of specimens of Nipalese birds forwarded by me, three years ago, to the Zoological Society of London, were three or four of the subject of the present article. They were marked in the imperfect list obligingly returned to me as "a new form nearly allied to *Pastor*." But, if *Pastor roseus* be the type of that genus, I confess I cannot perceive much affinity with our bird, either in structure or in manners. And, if a strong, arched, solid and compressed bill, united with gradated wings, and very strong feet, be *the* marks of the *Crateropodinæ*, to that sub-family, I conceive that our bird should be referred; the more especially as its shy and retiring habits are alien to those of the whole *Corvidæ*, and in a yet more particular manner, to those of the *Sturnine* branch of it. The Indian *Stares* seem to have perplexed systematists most wofully, though, I fancy, there is not one of us exiles 'in the land of the sun,' but readily